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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,387	07/31/2001	Kuo-Jeng Wang	JCLA7374	4402

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BERKELEY LAW & TECHNOLOGY GROUP
1700NW 167TH PLACE
SUITE 240
BEAVERTON, OR 97006

EXAMINER	
WORKU, NEGUSSIE	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/920,387	WANG, KUO-JENG	
	Examiner	Art Unit	
	Negussie Worku	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-6, 7 and 12* is/are rejected.

7)☒ Claim(s) *2-4, 8-11 and 13-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Negussie Worku 4/5/06

DOUGLAS Q. TRAN
PRIMARY EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1. Applicant's arguments, filed on Feb 06, 2006, with respect to the rejection(s) of claim(s) 1-11, have been reviewed and fully considered. However, upon further consideration, a new ground(s) of rejection is made in view of the Office action discussed below. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,5-6, 7 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi (USP 6,490,057), in view of Bell (USP 4748514).

With regard to claim 1,Sakaguchi teaches a control device (motor drive section 13 of fig 3, in conjection with main controller CPU of fig 3. col.8, lines 12-15) for controlling a scanning speed of a scanner (scanner CCD 9 of fig 3), comprising: a decision device (scaling processor 20 of fig 3) coupled to an input device (CCD scanner

9 of fig 1), said decision device (20 of fig 3) capable of receiving the input image data and outputting decision (output image data 23 of fig 4) data based at least in part on count data and data access volume; a driving device (driving device 17 of fig 3) coupled to the decision device (processor 20 of fig 3) for receiving the decision data.

Sakaguchi does not expressly teach an outputting decision data based at least in part on count data and data access volume.

Bell in the same area of variable rate scanning speed control as shown in (fig 2), teaches outputting decision data based at least in part on count data (sensor 65 of fig 2, may sense data read out from the amount of data stored in buffer 60 of fig 2, subtracting the amount of data, col.4, lines 5-15, and data access volume, (a predetermined buffer residual capacity to control the image scanning speed, col.4, lines 40-50).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Sakaguchi to include: an outputting decision data based at least in part on count data and data access volume.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device Sakaguchi by the teaching of Bell for the purpose of obtaining a controlled speed of the scanner with respect to the quantity of document to be scan in order to determine the speed of scanner based on the capacity of the job left in the feeding device or on a tray.

With respect to claim 5, Sakaguchi teaches the control device (motor drive section 13 of fig 3, in conjection with main controller CPU of fig 3. col.8, lines 12-15), wherein the input device (CCD image sensor 9 of fig 3) further includes: an optical sensor (CCD image sensor 9 of fig 4) for receiving an external signal and outputting an analogue signal (A/D 28 of fig 4); an analogue/digital converter (28 of fig 1) coupled to the optical sensor for receiving the analogue signal and converting the analogue signal into a digital signal, (col.8, line 45-50) and then outputting the digital signal (A/D 28 of fig 3); and an image processor (processor 20 of fig 4) coupled to the analogue/digital converter (A/D converter 28 of fig 4) and the decision device (processor 20 of fig 3)for receiving the digital signal and converting the digital signal into the input image data, and then outputting the input image data to the decision device (20 of fig 3).

With respect to claim 6, Sakaguchi teaches the control device (motor drive section 13 of fig 3, in conjection with main controller CPU of fig 3. col.8, lines 12-15), wherein the driving device (13 of fig 3) further includes: an electric motor (motor 10 of fig 3); and a motor controller (13 of fig 3) coupled to the electric motor and the decision device (processor of fig 3) for receiving the decision data and controlling the running speed of the electric motor according to the decision data (motor drive section 13 of fig 3, in conjection with main controller CPU of fig 3. col.8, lines 12-15).

With respect to claim 7, Sakaguchi teaches a method for controlling a scanning speed of a scanner, (motor drive section 13 of fig 3, in conjection with main controller CPU of fig 3. col.8, lines 12-15).

Sakaguchi does not expressly teach or disclose providing count data; providing a largest data access volume; and determining the scanning speed of a scanner according to a ratio between the count data and the largest data access volume.

However, Bell teaches providing count data (sensor 65 may senses the capacity of the buffer 60 by subtracting the amount of data stored in the buffer 60 of fig 2, col.4, lines 5-10); providing a largest data access volume (predetermined buffer residual capacity which is chosen to provide a sufficient buffer reserve—col.4, lines 10-15); and determining the scanning speed of a scanner according to a ratio between the count data and the largest data access volume, (col.4, lines 5-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Sakaguchi to include: disclose providing count data; providing a largest data access volume; and determining the scanning speed of a scanner according to a ratio between the count data and the largest data access volume.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device Sakaguchi by the teaching of Bell for the purpose of obtaining a controlled speed of the scanner with respect to the

quantity of document to be scan in order to determine the speed of scanner based on the capacity of the job left in the feeding device or on a tray.

With respect to claim 12, Sakaguchi teaches a method for controlling a scanning speed of a scanner, (motor drive section 13 of fig 3, in conjection with main controller CPU of fig 3. col.8, lines 12-15).

Sakaguchi does not expressly teach or disclose means for providing count data; means providing a largest data access volume; and means determining the scanning speed of a scanner according to a ratio between the count data and the largest data access volume.

However, Bell teaches means (65 of fig 2) providing count data (sensor 65 may sensor the capacity of the buffer 60 by subtracting the amount of data stored in the buffer 60 of fig 2, col.4, lines 5-10); means (buffer 60 of fig 2) providing a largest data access volume (predetermined buffer residual capacity which is chosen to provide a sufficient buffer reserve—col.4, lines 10-15); and means (controller70 of fig 2) determining the scanning speed of a scanner according to a ratio between the count data and the largest data access volume, (col.4, lines 5-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Sakaguchi to include: means for providing count data; means providing a largest data access volume; and means determining the scanning speed of a scanner according to a ratio between the count data and the largest data access volume.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device Sakaguchi by the teaching of Bell for the purpose of obtaining a controlled speed of the scanner with respect to the quantity of document to be scan in order to determine the speed of scanner based on the capacity of the job left in the feeding device or on a tray.

Claims objected to having Allowable subject matter

4. Claims 2-4, 8-11, 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 2-4, the prior art does not teaches or disclose the control device, wherein the decision device further includes an image buffer coupled to an output terminal of the input device capable of receiving the input image data, temporarily storing the input image data and outputting output image data to an input/output interface coupled to the decision device; an up-down counter coupled to an input terminal of the image buffer and an output terminal of the image buffer capable of counting and recording data access volume inside the image buffer and outputting count data; and a comparator coupled to the up-down counter capable of receiving the count data deciding whether to increase or determine the scanning speed according to the count data and outputting the decision data.

With respect to claim 8, the prior art does not teaches or disclose the control method, wherein the scanner scans at full speed when the count data is greater than 3/4 of the largest data access volume.

With respect to claim 9, the prior art does not teaches or disclose the control method, wherein the scanner scans at 3/4 of full speed when the count data is smaller than 3/4 of the largest data access volume but greater than 1/2 of the largest data access volume.

With respect to claim 10, the prior art does not teaches or disclose the control method, wherein the scanner scans at 1/2 of full speed when the count data is smaller than 3/4 of the largest data access volume but greater than of the largest data access volume.

With respect to claim 11, the prior art does not teaches or disclose the control method, wherein the scanner scans at 1/4 of full speed when the count data is smaller than 1/4 of the largest data access volume.

With respect to claim 13, the prior art does not teaches or disclose the apparatus, wherein said means for determining the scanning speed further comprises determining the scanning speed at approximate speed if the count data is grater than approximately 3/4 of the largest data access volume.

With respect to claim 14, the prior art does not teaches or disclose the apparatus, wherein said means for determining the scanning speed further comprises determining the scanning speed as approximate 3/4 of speed if the count data is smaller than approximately 3/4 of the largest data access volume but greater than approximately 1/2 of the largest data access volume.

With respect to claim 15, the prior art does not teaches or disclose the apparatus, wherein said means for determining the scanning speed further comprises determining the scanning speed as approximately 1/2 of speed if the count data is smaller than approximately 3/4 of the largest data access volume but greater than approximately 1/4 of the largest data access volume.

With respect to claim 16, the prior art does not teaches or disclose the apparatus, wherein said means for determining the scanning speed, further comprises determining the scanning speed as approximately 1/4 of full speed if the count data is smaller than approximately 1/4 of the largest data access volume.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Davis Moore can be reached on 571-272-7437, The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Negussie Worku
4/6/08

DOUGLAS Q. TRAN
PRIMARY EXAMINER